

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site
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AsahiKASEI



LEONA™ 1300G

Asahi Kasei Corporation - Polyamide 66

Tuesday, March 19, 2024

General Information

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Uses	• Automotive Applications • Automotive Under the Hood • Electrical/Electronic Applications • Structural Parts
Automotive Specifications	• GM GMP.PA66.065
Part Marking Code (ISO11469) (ISO 11469)	• >PA66-GF33<

Other Documentation

Literature	• Moldflow Data • Molding Conditions • SDS • Technical Handbook
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ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.39	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	--	1.7	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	10000	8000	MPa	ISO 527-1
Tensile Stress				
Break, 23°C	190	135	MPa	ISO 527-2
--	186	132	MPa	ASTM D638
Tensile Elongation				
Break	3.0	5.0	%	ASTM D638
Break, 23°C	3.0	5.0	%	ISO 527-2
Flexural Modulus				
--	9300	6300	MPa	ASTM D790
23°C	9000	6800	MPa	ISO 178

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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Mechanical	Dry	Conditioned	Unit	Test Method
Flexural Strength				
--	289	216	MPa	ASTM D790
23°C	275	202	MPa	ISO 178
Taber Abrasion Resistance				ASTM D1044
1000 Cycles	--	15.0	mg	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	11	16	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	72	83	kJ/m ²	ISO 179
Notched Izod Impact	130	150	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	96	75		ISO 2039-2
R-Scale	120	112		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	260	--	°C	ASTM D648
0.45 MPa, Unannealed	265	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	250	--	°C	ASTM D648 ISO 75-2/A
CLTE - Flow	3.0E-5	--	cm/cm/°C	ASTM D696
Specific Heat	1590	--	J/kg/°C	
Thermal Conductivity	0.30	--	W/m/K	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	--	ohms	ASTM D257 IEC 60093
Volume Resistivity				
--	1.0E+15	--	ohms·cm	ASTM D257
23°C	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength	28	--	kV/mm	ASTM D149 IEC 60243-1
Comparative Tracking Index				IEC 60112
3.00 mm	600	--	V	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.75 mm)	HB	--		UL 94
Oxygen Index	23	--	%	ASTM D2863

Processing Information

Injection	Dry	Unit
Drying Temperature - Vacuum Dryer	80 to 90	°C
Drying Time - Vacuum Dryer	2.0 to 3.0	hr
Processing (Melt) Temp	275 to 295	°C
Mold Temperature	75 to 85	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

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